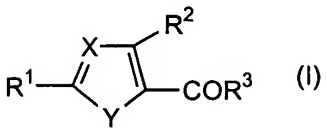
ABSTRACT

1. A cyclic compound of the formula (I) or a pharmacologically acceptable salt thereof,



(I)

wherein X is =CH– or =N–,

Y is –NH– , $-NR^4-$, –S– , –O– , –CH=N– , –N=CH–,

–N=N– , –CH=CH–, etc., R^1 is a lower alkoxy group, an amino group, a heterocyclic ring containing N atom(s), or a hydroxy group substituted by a heterocyclic ring containing N atom(s) (each of which is optionally substituted), R^2 is a lower alkylamino group which is optionally substituted by an aryl group, a lower alkoxy group which is optionally substituted by an aryl group, a lower alkoxy group substituted by an aromatic heterocyclic ring containing N atom(s), R^3 is an aryl group, a heterocyclic ring containing N atom(s), a lower alkyl group, a lower alkoxy group, a cyclo lower alkoxy group, a hydroxy group substituted by a heterocyclic ring containing N atom(s), or an amino group (each of which is optionally substituted), and R^3 and a substituent in Y may be combined to form a lactone ring. The compound of the present invention has excellent selective PDE V inhibitory activity and therefore, is useful as a therapeutic or prophylactic drug for treating various diseases due to functional disorders on cGMP-signaling.